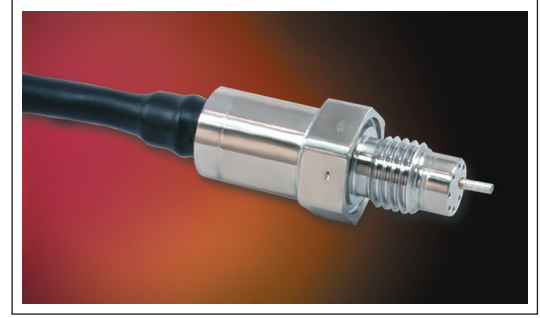




ULTRAMINIATURE 5V OUTPUT HIGH TEMPERATURE PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

MAKS-8ET(X)

- Smallest High Performance Amplified Transducer Worldwide
- High Temperature Electronics 392°F (200°C)
- Rugged Design Provides Compatibility With Most Conductive Media
- Patented Leadless Technology **VIS**[®]
- High Over Pressure Capability
- Adaptable For A Wide Variety Of Applications
- Designed and Engineered For Severe Environmental Conditions
- External RTD



The MAKS-8ET(X) is one of the newest generation of Kulite's smallest miniature amplified transducers currently available. The sensing sub-assembly is protected from mechanical damage by a protective screen, which has been shown to have minimal influence on the frequency response of the sensor. Incorporation of Kulite proprietary high temperature 392°F (200°C) electronics within the main body allows for operation from an unregulated power supply of 8 to 16VDC.

RECOMMENDED MOUNTING TORQUE

PRESSURE	CALIBRATED TORQUE	
≤ 100 mBar (1.45 PSI)	4 Nm	35.40 in-lb
101 mBar to 12 Bar (1.46 to 174 PSI)	4 Nm	35.40 in-lb
12.1 Bar to 70 Bar (175 to 1000 PSI)	6 Nm	53.10 in-lb

MAKS-8ET(X) WIRING

COLOR	FUNCTION
RED	+ EXCITATION
BLACK	- EXCITATION
GREEN	+ SIGNAL
YELLOW OR WHITE	TEMP. OUT
BLUE	TEMP. OUT

(X) Denotes FSR and Residual Unbalance Options (A), (B), (C), (D) or (E).

INPUT	Pressure Range	1 15	5 73	10 145	15 218	70 1015	100 1450	140 2030	210 3045	300 BAR 4350 PSI	
	Operational Mode	Absolute, Sealed Gage									
	Over Pressure	2 Times Rated Pressure ≤ 70 BAR (1000 PSI), 1.5 Times Rated Pressure > 70 BAR (1000 PSI) To a Max of 345 BAR (5000 PSI)									
	Burst Pressure	3 Times Rated Pressure to a Maximum of 380 Bar (5500 PSI)									
	Pressure Media	Most Conductive Liquids and Gases. Please Consult Factory (All Media May Not Be Suitable with O-Ring Supplied)									
	Rated Electrical Excitation	8 - 16 VDC									
	Maximum Electrical Current	10 mA (Max.)									
	RTD Excitation	0.3mA (1mA Max.)									
OUTPUT	RTD	1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) in Liquid									
	Output Impedance	5 Ohms (Typ.)									
	Full Scale Reading (X)	4.5V ± 50 mV (A)	4.9V ± 50 mV (B)	4.9V ± 50 mV (C)	4.5V ± 50 mV (D)	4.75V ± 50 mV (E)					
	Bandwidth (-3dB)	DC to 5 kHz									
	Residual Unbalance (X)	500 ± 50 mV (A)	350 ± 50 mV (B)	300 ± 50 mV (C)	150 ± 50 mV (D)	300 ± 50 mV (E)					
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.25% FSO (Max.)									
	Resolution	Infinitesimal									
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	6.5x10 ⁻⁴	2.3x10 ⁻⁴	1.4x10 ⁻⁴	1.1x10 ⁻⁴	3.6x10 ⁻⁵	3.5x10 ⁻⁵	2.5x10 ⁻⁵	1.9x10 ⁻⁵	1.7x10 ⁻⁵	
	Insulation Resistance	> 100 Megohm Min. @ 50 VDC									
	Operating Temperature Range	-4°F to +392°F (-20°C to +200°C)									
	Compensated Temperature Range	+68°F to +392°F (+20°C to +200°C)									
	Total Error Band (Excluding End Points)	± 1.5% FS/100°F ≤ 217.5 PSI (15 BAR), ± .75% FS/100°F ≥ 217.5 PSI (15 BAR)									
	Linear Vibration	80g Peak, Sine 5 to 5000 Hz									
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration									
PHYSICAL	Electrical Connection	5 Conductor 26 AWG Cable 40" (1000) Long									
	Weight	10 Grams (Max.) Excluding Cable									
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology									
	Mounting Torque	See Table									

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous (C) development and refinement of our products may result in specification changes without notice. Copyright © 2023 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.